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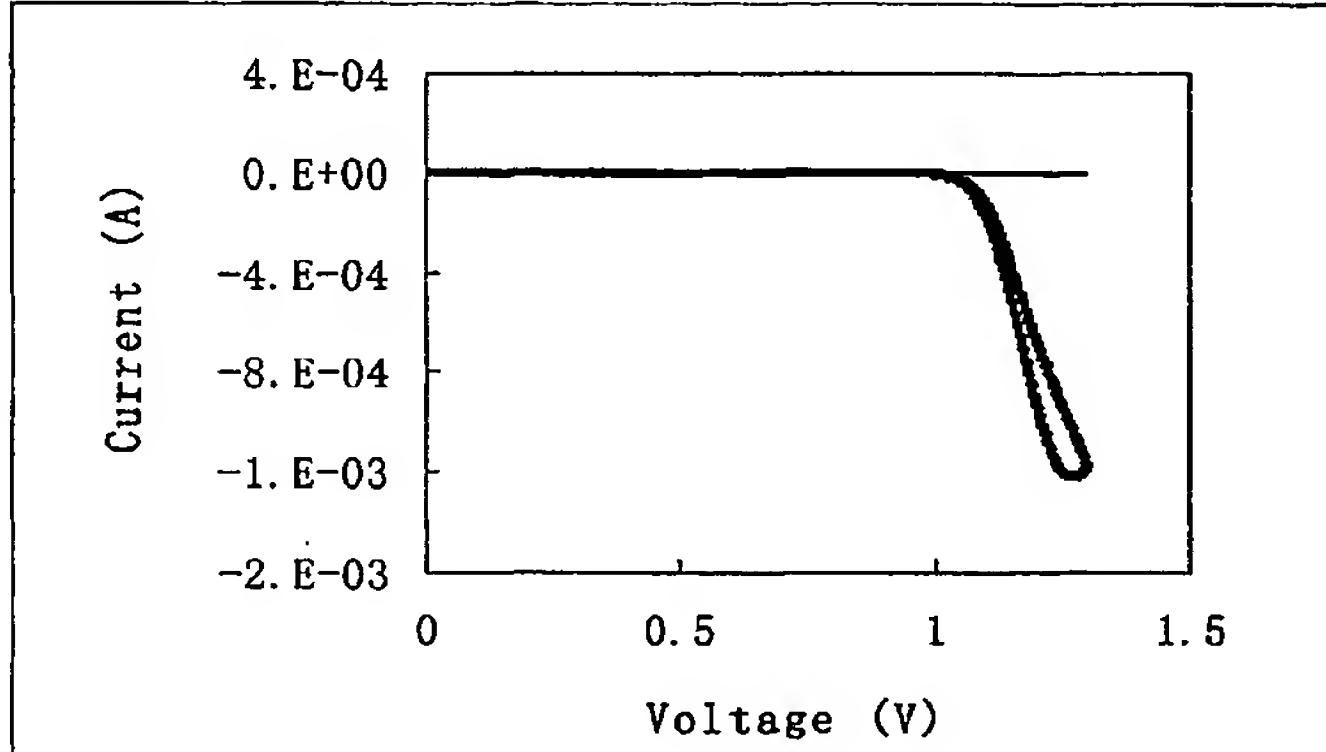
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(54) Title: AHEMICALLY AMPLIFIED ELECTROCHEMICAL DETECTION OF AFFINITY REACTION

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(57) **Abstract:** This invention relates generally to the field of electrochemistry. In particular, the invention provides a method for assaying an analyte, using, *inter alia*, a reactant capable of binding and/or reacting with an analyte to be analyzed on an oxide electrode and a reducing agent not capable of being oxidized directly by said electrode to generate reduced electrochemically active molecule that participates in oxidation-reduction reactions repeatedly to generate an amplified electrochemical signal to determine presence and/or amount of said analyte in said sample.